AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated hereafter. It is believed that the following amendments and additions add no new matter to the present application.

Please replace the paragraph starting on p. 6, line 13 with the following amended paragraph:

The DBDS 100 includes a plurality of sub-distribution networks 160 connected to the headend 102 by communication media 150. Each sub-distribution network 160 includes a hub 104 and the plurality of nodes 106, which are connected to the hub 104. The hub 104, which is also connected to the headend 102 through communication link 166, functions as a mini-headend for the introduction of programming and data information to sub-distribution network 160. By having a plurality of~~,~~ hubs 104 that function as mini-headends, the introduction of different data information and programming to various sub-distribution networks 160 is facilitated. For example, the subscriber location ~~108(B)~~ 108(b), which is connected to node ~~106(B)~~ 106(b), can receive data information and programming that is different from the data information and programming available to subscriber location ~~108(C)~~ 108(c), which is connected directly to headend 102, even though the subscriber locations ~~108(B)~~ 108(b) and ~~108(C)~~ 108(c) may be in close physical proximity to each other. Data information and programming for subscriber location ~~108(B)~~ 108(b) are routed through hub 104 and node ~~106(B)~~ 106(b), and hub 104 can introduce data information and programming into the DBDS 100 that are not available through the headend 102.

Please replace the paragraph starting on p. 10, line 8 with the following amended paragraph:

Switch [[224]] 220, an example of which is an asynchronous transfer mode (ATM) switch, and the router 222 provide an interface to a gateways 226(A) and 226(B), respectively; and the gateways 226(A) and 226(B) provide, among other things, access to the internet and output network transport streams 250(E) and 250(F), respectively. The router 222 receives messages from the DHCTs 110 via QPSK modem array 228. The

messages from the DHCTs 110 frequently include session/control messages, which are used for creating and controlling a session. Typically, the router 222 routes the session/control messages to the application server ~~226(A)~~ 216(A), or the router 222 sends the messages to other appropriate devices such as network controller 234 or sub-network controller 236. The headend 102 and hub 104 also contain at least one modulator that receives a network transport stream and converts the transport stream into a modulated signal, such as, for example, a radio frequency modulated signal. In the preferred embodiment, the hub 104, which acts as min-headed, introduces programming into the DBDS 100, which is modulated and transmitted by MQAM 230. Generally, the headend 102 includes a plurality of MQAMs 230, and hub 104 includes at least one MQAM. In alternative embodiments, the headend 102 and hub 104 include other transmitters for transmitting content to the subscribers 108.

Please replace the paragraph starting on p. 16, line 22 with the following amended paragraph:

Referring to FIG. 6, the network message 600, which is sent in response to an ~~INSTM~~ INTSM message, includes a device type field 602, an output TSID field 604, an input TSID field 606, and a network status field 608. The device type field 602 indicates the type of device that is sending network message 600. Possible designations for the type of device include, but are not limited to, transport stream source, transport stream handler, satellite signal receiver, server, video-on-demand server, gateway, MQAM, modulator, DHCT, etc. The device-type field 602 can also include a device identifier that is associated with the device for identifying the device. For example, the device-type field 602 for satellite signal receivers 214(A) - 214(C) might be "receiver_1," "receiver_2," and "receiver_3," respectively. It should be noted that devices that transmit multiple output transport streams return a network message 600 for each of their output network transport streams. For example, MQAM 230(A) transmits 4 output network transport streams 254(A) - 254(D), and therefore, it sends four network messages 600. In the preferred embodiment, each network message 600 has a different device type field 602, which is used for identification purposes. For example, a first network

message 600 from MQAM 230(A) might have "MQAM_1.1" as the device-type field 602, and a fourth network message from MQAM 230(A) might then have "MQAM_1.4" as the device-type field 602. For devices that transmit a plurality of transport streams, the device type field 602 can be thought of as a device indicator such as "MQAM_1" with an appended transmitter identifier such as, for example, ".1" or ".4." In a similar fashion, MQAM 230(B) responds to the ~~INSTM~~ INTSM message with four network messages 600 having device type fields 602 ranging from "MQAM_2.1" - "MQAM_2.4."

Please replace the paragraph starting on p. 17, line 10 with the following amended paragraph:

The output ~~TISD~~ TSID field 604 indicates the value of the TSID for the output network transport stream. The output TSID field 604 is null for network messages received from DHCTs 110.

Please replace the paragraph starting on p. 24, line 27 with the following amended paragraph:

The network transport stream map 400 is a dynamic map that reflects the current TSIDs of the network transport streams 250, 252 and 254. Each network transport stream handler ~~respond~~ responds to changes in its input network transport stream by sending a network message to ~~their~~ its controller; and the controller dynamically updates the network transport stream map 400. The network transport stream map 400 maps the network transport streams from their sources to their output tier level devices or to the DHCTs 110, and the network transport stream map can be used by the operator of the DBDS 100. In one embodiment, a "master" network transport stream map 400 is stored in memory 238 of network controller 234. The "master" network transport stream map is stored in the memory 238 prior to maintenance of the DBDS 100 and is used for, among other things, trouble shooting the DBDS 100 after maintenance. Assume, for example, that during maintenance the communication links having network transport stream 252 and 250(E) were accidentally crossed wired such that MQAM 230(A) received the

network transport stream 250(E) and MQAM 230(B) received the network transport stream 252, then the system would be thrown into confusion and chaos. In prior systems, the operator of the system might have to resort to a physical examination of all of the communication links that carry network transport streams to find the pair of crossed wires. However, in the present DBDS 100 system, the operator of the DBDS 100 could determine which wires were accidentally crossed by simply comparing the "master" map with a network transport stream map generated after the maintenance. Other uses for a network transport stream map, which is dynamic, are recognizable to those skilled in the art.

Please replace the paragraph starting on p. 29, line 3 with the following amended paragraph:

The device portion 1002 is for generating information that is specific to the device. Generally, the device portion 1002 includes identification field 1006, a transport ID field 1008, ~~and~~ a device information field 1010, and network data field 1012.

Please replace the paragraph starting on p. 31, line 9 with the following amended paragraph:

The exemplary DNIT 1100(A) also includes link status information 1106(A) and 1106(B) for each of its received network transport streams 252 and 250(D), respectively, which are currently "good." Exemplary DNIT 1100(B) from BIG 224 also includes the link status information 1106(C), 1106(D) and 1106(E), which are associated with network transport streams 250(A), 250(B) and 250(C), respectively, and which are also currently "good." If network transport stream 250(C) were to be broken, the BIG 224 would determine that the link status is now "bad," in which case the link status 1106(E) of the next DNIT 1100(B) from BIG 224 would read "bad." This information, that the link status of network transport stream 250(C) is bad, is then propagated down stream and it is included in a network message transmitted to the network controller 234 or sub-network controller 236. The controller that receives the network message automatically responds to it by rerouting ~~of~~ the content of the transport

stream 250(C) or by alerting the operator of the DBDS 100. It should be noted that DNIT 1100(A) is an embodiment of a table that is propagated downstream through a network transport stream. Those skilled in the art will recognize that more or less information can be included in the table.